**Twitter**

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Mark May: -- as we get started, but just to keep things on schedule, good morning everyone and welcome to Citi's Global Tech conference. Appreciate everyone getting up early and being with us this morning and for the team at Twitter for participating this year; Ned Segal, the Company's CFO and Krista Bessinger, Head of IR, so I appreciate you guys participating.

Ned Segal: Thanks for having us Mark.

Mark May: Thank you. Maybe just to get things started, I know that the company's been very busy on the product development side both on the consumer facing side of the business as well as in the backend some of the stuff that we all don't get privy to kind of see what's going on. So maybe a couple of questions parsing out both on the ad product development and the consumer product development side of the business. One of the questions I get a lot are what are some of the specific changes that Twitter has made, some enhancements that you've made to the ad product over the last year or two that have really resonated with investors and have helped to enhance the performance of ads on Twitter if we could start there?

Ned Segal: Sure, that's a great question. We think a lot about things we can do to improve relevance and show better ads to people when they're on Twitter and I'll give you two examples; one is on the platform side where there's always work we can do to improve the relevance of what people see. There are different ways you can do that but one could be if you sift through more ads before you identify the one that you're going to serve, you can - the odds of you showing a relevant ad are higher but there are all kinds of tradeoffs you make when you do that.

You could impact latency, you don't want to -- people generally don't wait around for an ad to load so you only want to do it if it's not going to cost you time. And so there's a technology improvement that you need to make in order to drive something like that, but that's a great example of something that we work on on the platform side which can improve relevance.

The second one is we've come out with two new ad formats over the last year or so. The video Web site card and the video app card. When you show a short video and it gives people the opportunity to click through to something, that really blends brand and direct response, first of all. Second of all, it ends up performing much better than it might have otherwise and so we've seen those two new ad formats really drive both existing spend where there's been shift towards those formats but they've also brought incremental ad dollars to Twitter. So those are great examples of things that we've done on the ad platform side but we think there's a lot more work for us to do both by continuing to improve the ad formats, continuing to drive better relevance, helping advertisers see the benefits of using video and even within video getting people to show shorter videos; so a six second video just performs much better than a 30 second video would, as you might expect as it's going through a timeline.

Mark May: One of the things I heard you say was the number of ads that you can source from helps to improve the personalization there. Imagine the number of ads you have which maybe somewhat correlated with the number of advertisers you have has a lot of other benefits as well; one that comes to mind is you operate an auction. So the more advertisers you have, the more ads and more advertisers probably the more robust the auction is and that can have some financial benefits as well. I don't think you guys have disclosed the number of advertisers but I presume it's quite a bit less than some of the Facebook's and the Google's of the world.

How important is that to the dynamic -- to the growth of the company to seeing better ad targeting, better CPM's and what are some of the things that you guys can do to help bring in more advertisers onto the platform I guess?

Ned Segal: Sure, well let's go back to the early part of your question where you talked about ways that you can have more ads. One is to have more advertisers in the auction and the other is to have more demand from existing advertisers. One of the keys to our strategy as we return to revenue growth over the last year really was to work with the largest of our advertisers to prove out our strategy with them around talking more about video, executing well with our ad formats and spending more time with them articulating the value proposition of them connecting with their customers on Twitter. If you go back almost a year ago now, we talked about how the top 100 advertisers were growing in the United States and overall in the context of a business that was still contracting. That, I think, was a key way to demonstrate where our strategy began and the turnaround which was to work with the largest of the advertisers first.

There's two other parts to the strategy; the second one is to work with what we call the torso which are those next group of hundreds of advertisers where we think the same playbook can really resonate but we're earlier in the execution around that part of the playbook than we are with the largest of the advertisers but we have great proof points both for ourselves and for that next group of advertisers around the success and the strong ROI that they can get on Twitter as far as getting in front of their customers on the platform.

The next chunk is the long-tail, the many millions of advertisers who have Twitter handles who spend time on the platform but maybe don't advertise. There are a few things that we need to do in order to really compel them and a bunch of them are things that require prioritization from our part and that we haven't yet prioritized and haven't yet resourced but when we clearly articulate the value proposition to them, which I think will really resonate when we get there, because so much of the use case for so many of us who use the platform frequently is around local and so many of these small businesses that we think about who may advertise in other places on the Internet but aren't yet investing on Twitter are local and small businesses. We think there's a strong value proposition for them but we haven't really invested in articulating it and then we're going to have to invest in the platform to both bring them to Twitter as advertisers and to make sure that they are getting a strong ROI while they're there.

A little more than a year ago, we came out with something called Twitter promote mode which was a subscription service, $99.00 a month to allow small businesses or anybody really, you should feel free to try it Mark, we'd be delighted to have you as a customer, to promote their tweets and to help them amplify their voice on Twitter.

We've seen good early returns from that but more than anything to us, that demonstrates that there's a real opportunity there we're just going to have resource it differently before we can realize the potential that we see there.

Mark May: Okay. Most of the strong opinions that I have are work related and I'm not allowed to use Twitter but --

Ned Segal: We can talk to somebody on the way out about that.

Mark May: Just on your point around local, I assume you're kind of talking about more of a self-service platform for those. As I've talked to companies over the years, it seems like that in reality the biggest users of self-service platforms are more direct response advertisers than local or SMB. How much of the development work that guys are doing with your self-service platform is to cater to more of the DR type advertisers or to the local SMB's that you were referring to?

Ned Segal: So there's a couple of things in your question. The first is, although we do invest in the self-service platform, we're going to have to invest in it more aggressively before we really see the benefits or the fruits of our labor as far as the opportunity goes. But when we do invest in it, it's about giving the smaller businesses who want a self-service option all of it's available on Twitter. So we don't want to make the choice for them whether they're going to do brand advertising or direct response and we continue to see this blending of the two through things like the video Web site card and the video app card. So when we do the work, from an engineering perspective, it will be not to make the choice for them so much as it will be to make the value proposition clear and to really eliminate the friction of getting them on the platform and getting them in front of their customers on Twitter.

Mark May: Got it. And in terms of still having a lot of opportunity but it's going to require investment, what about personalization of the ads? I'm thinking from the number of ads that you see versus the number that I see based on my behavior or the type of ads, like how -- where are you from one to ten in terms of really having the ads personalized on a one-to-one basis -- the ad experience?

Ned Segal: Yeah sure. I wouldn't want to give you a number because we continue to find improvements that didn't -- that we didn't -- that were not apparent to us quarters before and a great example of that is this past quarter where we grew our audience in terms of DAU 11% and we grew ad engagements 81%. Now, some of that's just because of the mix shift to video ads where there's a lower threshold to be counted as an engagement.

But a lot of it also is because of increased demand that is a strong execution on the sales side, the right ad formats and better relevance. And so when you're able to do all of those things well, you end up with a much better ad engagement number than you do audience number. We still think there's a lot of work in front of us to continue to improve relevance so that we can show great ads to people that feel like they're part of the Twitter experience. You know, if there's a big product launch and you see ads that are part of the ecosystem, that may not feel like an ad to you, it might feel like part of the experience.

If you're a CFO and you see ads for software that CFO's buy which you'd be shocked to know that I find those on my timeline, that might feel like it's a relevant part of the experience.

Mark May: Video ads that you mentioned have grown quite a bit recently I think are now over half of your ad revenue. Where are we in that shift? Like is that going to continue to increase at a pretty meaningful rate in terms of the mix of the overall business or are we at a point now where it's grown really rapidly, adoption has grown, and now we'll start to see that kind of level out a little bit or that moderate?

Ned Segal: Yeah, so we think there's so many great opportunities for advertisers to use video that they're not yet taking advantage of that we would expect that video ads would continue to grow and so we hope that it grows as a percentage of the business. Sometimes that concerns people because they worry that lower cost per engagement ad might mean that there are fewer ad dollars effectively available for us. We actually think of it quite differently. We think that if cost per engagement continues to go down because we're showing lower CPE ads that deliver a strong ROI to advertisers because they're video, because they're short, because they're compelling, because they're relevant, that we'll be able to show more of them. And last quarters numbers are a great example of where we've seen a steady trend of cost per engagement going down but it was 31% to 32% against the ad engagements which went up 81% and so as long as they're more than offsetting the ad engagements relative to the cost per engagement, they deliver a growing CPM and we're delighted with the ROI that we deliver for advertisers. So hopefully we're early in the transition and then even when we get to a point where video has become such a big part that there isn't that much room left for it to grow, we then have the opportunity to continue to deliver more compelling ad formats within video.

Mark May: Maybe can you then just at a high level compare the -- you know, net those things out? The engagement levels and the CPE's and just looking at yield, you know, for every thousand available ad impressions that you have and kind of compare the video card, the video ad products with kind of the other non-video ad products. What is the tradeoff on just the yield?

Ned Segal: You know, we haven't really broken it out that way but the yield on video ads has been really strong for advertisers. Part of that is because the call to action might just be to watch it for a short period of time. Part of it is because we're making sure that the ads have preloaded so that before they get to the screen they're ready to go so you're not having to sit around and wait for an ad. Part of it is because we're showing the right ad to you and that it's something that's relevant and interesting to you that may compel you to click through or to watch the entire ad.

Mark May: And maybe the last one on ads, where is the company -- you've obviously done a lot of premium content partnership deals, many of which are video content. Where are you in terms of building ad products around adoption for ad products to monetize with pre-roll and that sort of thing. Is that an opportunity for the company or?

Ned Segal: Well, I'm sure there's opportunity to improve the formats. There's always opportunity to improve the formats but we think that we've got a great offering around pre-roll and the great content that we have on Twitter whether it's all of the goals around the World Cup or the Bloomberg TicToc offering or the ESPN briefs that people will be able to see on the platform. There's great content and we're always working hard both along with the content owners and on our own to find the appropriate sponsors and the appropriate buyers of in-stream ads that go along with them.

When you think about the broader video revenue, though, that we've talked about, remember that we're still really early in that premium content and its impact that it can have on the video as a percentage of overall revenue. So much of that video is video Website cards and video click cards and other types of video as well.

Mark May: Yep. Maybe just moving on to Twitter's audience and some of the user statistics and dynamics there. On the -- in terms of the U.S. audience, I think MAU's have hovered in the mid-60 million range give or take a few million for the last couple of years. I'm sure when you dig under the -- peel away the onion a little bit there's a lot of interesting dynamics. I wonder if you could talk a little bit about --

Ned Segal: Peel back the onion?

Mark May: What's that?

Ned Segal: Peel back the onion.

Mark May: Yes and then just -- what are -- maybe looking -- I don't know from a cohort perspective how you look at that user base, what portion of them are highly active and what engagement trends have looked like for some of your most active cohorts or users?

Ned Segal: Sure. There definitely is a lot happening underneath the numbers that have been relatively steady on an absolute basis whether you're looking at MAU trends globally or you look at them in the United States as -- a lot of that is a function of the broader health work that we've done and we've talked about some of the impact that we saw this past quarter that we anticipate this next quarter from our broader health work from decisions we've made to not pay for SMS to be delivered around the world in certain cases and from GDPR.

And we talked about the impact that we expect those to have this coming quarter as well on the earnings call.

When we look at the United States, we see this really big opportunity where there still are a lot of people that don't use Twitter everyday. At the top of the funnel, the numbers have been remarkably constant where we still see two million or more users who come to the platform everyday that haven't been on it for a month or more, a third of whom have never been on the platform before. And the real opportunity for us is to get more of them to stay and make Twitter a part of their daily lives. We've been pleased with the engagement trends from the people who use Twitter and the work for us is to get more people to come back more frequently and to stay longer when they're there.

Mark May: You mentioned the short-term outlook and there are a few factors on MAU outlook for the next -- for the current quarter. There were a few factors that are in-fact, impacting that. I wonder if maybe you could talk a little bit about that and maybe rank order, you know, these from health efforts to GDPR and SMS, maybe talk through a little bit of this, what's going on there and the magnitude of which ones are likely to have the largest impact.

Ned Segal: Sure. So we haven't ranked them but let me see if I can give a little color on this and I'll just point back to some of the things that we talked about on the earnings call back in July. And I'll preface all of this by saying that the goal at Twitter is to drive usage of the platform as a daily utility and DAU is going to be the best way to measure that but MAU is a number that's higher up in the funnel that gives you a sense for the work that we're doing to attract people to the platform and people who are available to us to basically convert to DAU over time. Sometimes we convert them to DAU immediately and so the impact on MAU and DAU is the same and other times we're converting existing monthly active usage to daily active usage. So those are the two ways that we think about growing DAU.

The three levers that we talked about on the call that had impact this past quarter that offset some of the growth that we would have seen were broader health initiatives, the SMS contracts and GDPR and we mentioned that just because of the way one calculates MAU and because of the visibility we had and the decisions that we made or impact that we see this quarter, we said that the number would be down in the mid single digits in the third quarter as well. So there's no update today to what we shared on the earnings call but that gives you a little color around what we said on the call.

Mark May: Got it. The -- obviously the DAU growth has been stronger than MAU growth for the past several quarters. Maybe you could talk through a few of the reasons why that's been the case and at some point I assume that these things kind of converge but maybe not only the factors that have enabled DAU to grow faster than MAU but how much more opportunity do you have with those factors to improve engagement?

Ned Segal: Sure. So we still see lots of opportunity to grow DAU both within the base of MAU. We've mentioned in the past that DAU is still well less than 50% of MAU and there's also lots of opportunity to grow DAU outside of the base of MAU. There's still 95% of the world that doesn't use Twitter every month.

Mark May: Yep.

Ned Segal: Within the -- let's see a couple of ways that the numbers can go differently. The first is, remember, that MAU is a more inclusive metric so it includes people who use Twitter or get the benefit of Twitter without being on the owned and operated properties. So there's the opportunity to get them to come to owned and operated properties when they might not have otherwise.

The second is that a lot of our health work impacts MAU more than it affects DAU. An example would be this past quarter where we talked about a number of accounts that we removed from the platform and if they were caught on the day they were created they didn't affect any of our user metrics. If they were caught in the month that they used the service but not the day that they used the service, it affected MAU and not DAU. So often when you're removing spam against suspicious behavior from the platform, it's going to have more impact on MAU than it will DAU.

So when you add all of those things together there are lots of ways that MAU can go in one direction and DAU can grow in another direction at any given point.

Mark May: And I think GDPR is one of the three or so factors that you've mentioned. Is that a factor that sort of is a one-time event or does it impact user behavior for a while because GDPR had a date and time when it became effective?

Ned Segal: So there's a little bit of both. The date and time as people have to accept the terms of service and the privacy policy and so that ought to largely be behind us because that was shown to people on May 25 or shortly thereafter and I guess in some cases leading up to it as we rolled out a new policy around the continent and around the world.

The second is there's some regulation around age of use which can vary from one country to another and there's a time to comply on that. So there could be some lagging impact from it but the lagging impact ought to be less pronounced and ought to play out overtime relative to accepting the terms of service and the privacy policy which really happens all at once.

Mark May: I know this is all kind of short-term perspective, but just on -- just one more on this topic. It seems like many of these factors, if it's health efforts or even the GDPR wouldn't have a huge impact on monetization, these would seem to be users that are maybe less engaged or is that fair to say that there's quite a bit of a disconnect between these user dynamics if it's SMS or health efforts in your ad business?

Ned Segal: So it's still early to say what the overall impact to GDPR could be on an advertising business on the Internet.

Mark May: Sure.

Ned Segal: But we've said that we haven't really seen a financial impact on the owned and operated properties from GDPR to-date. Having said that, we did see a little bit of impact around our MoPub business where it takes time to get the SDK's in the mobile publishers ads, I'm sorry, in the mobile publishers platforms and so there can sometimes be some lag after May 25th relative to when you're able to show or have a GDPR compliant experience for the mobile publisher in Europe.

If you just step back from all of that though and you think about the impact that GDPR can have, it can impact whether you're able to show relevant ads to people over longer periods of time. So far we haven't seen impact from it, no changes to what we've talked about there in the past.

Mark May: Got it. In addition to MoPub, are there any other parts of the business that are impacted?

Ned Segal: MoPub is the only -- no, MoPub is the one -- so some of the tap ends up showing up in MoPub but MoPub's the only business we have where we need to get developers to take an SDK before we can show ads on their platforms.

Mark May: Got it. Maybe moving to the international side of the business which has been particularly strong of late, Q3 and Q2 international ops contributed 70% of year-on-year incremental ad revenue growth, really strong international MAU growth slowing, you know, but still solid in revenue growth accelerating. So just wonder if you can talk a little bit, why the particular strength and monetization outside of the U.S.?

Ned Segal: Sure, I think there are a couple of things that play outside of the United States, one is really strong execution where I think our message has resonated really well with advertisers and there's some good examples of it where in Japan our hard work with -- in a more concentrated agency market has really resonated, we've had the right ad formats and we've had breakthroughs with the agencies and with the advertisers there that have led to increased demand and something that we're really pleased with. But we have other success stories too in Brazil in the Middle East and North Africa and in other parts of the world. China is another great example where helping the Chinese brands advertise outside of China has been a real success story for us over the last year or so. We're really pleased with the performance we've seen internationally and as we talked about before the hard work for us is to both get that to continue but also to continue to plug away in the United States so that we can get the business to continue to recover in the United States.

Mark May: Is there any particular, just kind of digging into that, format, ad type or advertiser category in particular? You mentioned some of the countries, the particular success within some of the large agencies but when you double click one further down, is there any other interesting drivers that you're seeing health in the business?

Ned Segal: I don’t think you could point to one, but I'll give you a few examples. One would be where the video has been really compelling in Japan, and that has worked really well for us, and for the advertisers on the platform. And the more ROI they see the more they invest. That's been a great story for us.

A second one is if you look at countries and you look at the launches of new apps, whether it's a game or another type of service that somebody might use on a mobile device, the owner of that brand or of that app typically advertises quite a bit and is willing to pay for the performance that they get as they launch in new geographies or as they launch a new version of the service in a new geography. And we've seen real success helping the job that we describe it as we get hired to help an advertiser launch something new. And Twitter can perform really well in that way for advertisers. And if you look around the world, you can see examples of that. And we're at the point now with a business of our size and all the markets that we reach where you can see any number of those in different geographies at different points during the year, and you can see that the message is really resonating that Twitter is a great place to launch something new.

Mark May: When you -- I'll just take Japan as a case study, when you're seeing meaningful amount of advertiser demand in a market like Japan, does your growth teams sort of zero in and you really start to focus on trying to do -- I guess what I'm curious about is the user dynamics of that particular country. Did you -- were you seeing strong user trends and then that led to this or are you seeing strong execution on the ad side and then your growth team kind of focuses on and now you're seeing some interesting growth on the user side?

Ned Segal: Sure. So it all starts with growing usage of Twitter as a daily utility for us, although the last couple of quarters we've grown revenue in excess of DAU. We know that overtime growing usage is going to be a really important driver for the business. It typically -- that is typically what starts the fly-wheel in any given geography where if you have density of usage, you're able to make a compelling case to advertisers.

The way we think about growing use of the platform isn't by putting up billboards on -- along freeways and showing television ads to get people that come to Twitter, it's really giving those who do come to the platform, given the top of the funnel has been so consistent and relatively healthy, giving them the great experience so they're more compel to stay longer and come back more frequently.

People come to Twitter because there's something happening in the world that they want to know more about. They want to be part of the conversation, and they want to see the conversation, they know they'll get that news is breaking on Twitter that is relevant to them and we just continue to do a better job of giving them a great experience around it. When we do that, we then have a great opportunity to show advertisers a strong ROI by getting them in front of their customers in that country. So Japan is a great example of that, but there are definitely others as well.

Mark May: And maybe one more on the international growth of late. How would you characterize the breadth of where that growth is coming from? And do you -- are you comfortable that at least in the short to medium-term that it's not too concentrated that you could see hiccups in one advertiser, a group of advertisers pull back and maybe you don't have others that step in how confident are you in this base of revenue and customers?

Ned Segal: Sure. Well, we're paid to worry, so we're always thinking about what could be wrong and what we can do to optimize to avoid it. And the things that we think about are just giving people a great experience on the platform whether they are a person is looking for something or an advertiser. We haven't talked much about customer concentration or geographic concentration. There are lots of things that we can do to continue to deliver Twitter to geographies where we don't have as much of a presence as we think we should have. And so we're working hard at that. But I'm paid to worry, so I worry about all the things you mentioned.

Mark May: What about -- one last one here on the international business. I wonder if you can talk about the profitability of the international segment. Is it materially higher or lower than the U.S. business and yeah --

Ned Segal: So we remember the development that we do in the United States or in another part of the world benefits the Twitter that people use everywhere. There is one version of Twitter. So when we learn about a use case for the platform or a need for a feature in a given geography, we carefully weigh whether we can benefit or drive benefit for the users of the platform all over the world with that improvement. So Bookmarks is a great example of that where we saw use case for that in Japan; we rolled it out more broadly. 280 is another great example of that where we recognized that people who could say more with fewer characters because of the language in which they were writing. The way they were abandoning fewer tweets and they were tweeting more often. We thought, we would eliminate friction in markets where you need more characters to say things such as English by giving them 280 characters instead and we've seen success around that. So the work that we do in any part of the world benefits the whole world when we do it. So it's hard to break out the development work by geography and when we look at the --

Mark May: Like ad opts and things that are more localized? So is there a -- now that you've seen all this growth lately, is there kind of a need to invest more heavily in your ad ops or do you feel like you've got a pretty good ad ops operation in these high growth markets?

Ned Segal: Well, it's less about the individual markets and it's more about the overall opportunity. When we think about our execution, we've talked about the areas that we prioritize when we invest and we'll grow headcount 10% to 15% this year.

First we think about the health, the health of the platform is top of mind for us when we think about how we allocate resources. The second one is growing audience and so that means engineers and product people who are most often in the United States. The third is the ad products, the revenue products and sales. And so that would be ad ops, which is the thing that you mentioned, but in a given geography it's more likely to be sales people in a market where we've seen real success the thing that we can have even more success just for having more feet on the street. And so those all continue to be big priorities for us in that order, but when we think about how to allocate resources.

Mary May: And the 10% to 15% headcount growth, that's off of a year -- coming off of year that was a pretty lean year, right? So 10% to 15% you'd characterize as a pretty heavy investment?

Ned Segal: Yes, it's a big investment. It's a big investment on our part and we think it's indicative of the opportunity that we see to get Twitter in more people's hands. But it's also indicative of the work that we think is so important for us to continue to do around the health of the platform and making sure that those who should be on Twitter have a great experience when they're there and that the spamming and suspicious behavior isn't on the platform.

Mark May: Are you accelerating the pace of investment in the back half of the year? Or -- I know your comp is kind of much easier in the first half, right, because of the kind of the reduction in some of the things you did earlier in the year. But are you accelerating your pace of investment in the second half?

Ned Segal: So I would just point you to the EBITDA and EBITDA margin guidance when you're thinking about the third quarter, but when we think more broadly, headcount typically people show up gradually over the course of the year. And the last thing you want to do when you're growing headcount 10% or 15% after some of the more difficult times that we've been through is have everybody show up on the same day. You probably couldn't give them a great experience and the impact that they'd have on the business might be diminished as opposed to on-boarding people gradually over the course of the year. One exception to that is that new college hires and recent graduates from business schools and other things, they typically show up in the third quarter.

Mark May: Sure.

Ned Segal: But if you -- typically when you're growing headcount 10% or 15% the goal is to do it gradually over the course of the year. There are other investments that we make that may be more prevalent one period versus another, but those often are diminished by the impact of the accumulating headcount.

Mark May: Okay. Maybe one quick question on the data services and then see if we have time for question from the audience. Data services revenue $110 million last quarter, up 29% year-on-year contributed 15% of total revenue, up from 11% to 12% just a couple of years ago. I assume that that's a pretty high margin business, correct me if I'm wrong, and can theoretically represent 30% or so of EBITDA based on our estimates, I don't know if you would push back on that. Maybe comment on that if you would. And then what's driven the recent step up in growth and how sustainable do you think that is for the data business?

Ned Segal: Sure. So first just to remind you that that line that says recall data and other includes the DES business, which has been a great performer for us and one where we've been executing on new strategy over the last couple of years. It's really resonating. And then the second piece of that line is the MoPub business. So I wouldn't want you to lose sight of MoPub when you think about that line and what it contains.

Mark May: Okay. Which also has a very different margin profile and growth profile? Go it.

Ned Segal: Yeah. That's right. Having said that, we did see strong performance from both this past quarter data has been pretty consistent in its strong performance and MoPub has seen a little more variability around it in the last few quarters.

They both are higher margin businesses, and businesses that we like for lots of different reasons, MoPub can help us extend the reach of an advertiser beyond our platform. And the data business allows us to sell the API's to access the largely public data on Twitter so that people can build businesses around it for whatever they see fit, whether it's to watch their brand or other people's brands or to glean other insights as a research institution or as an enterprise.

We've been really pleased with the performance around both of the businesses, but there's still lots more work for us to do around each of them. We haven't broken them out from a profitability perspective, but you're right to suggest that the data business, because you're selling API's, there's engineering work to do to make sure you're delivering a great experience. There's support work to do for people who are paying a lot for the service that you're providing them -- you have to pay salespeople to do the work of getting in front of customers, but it ends up being a pretty high-margin business.

Mark May: Maybe just quickly we have in room -- time for one.

Unidentified Audience Member: Think there could be an impact -- Facebook has noted that they're going to remove the ability to target use in the partner categories, the third-party data. Could that be a benefit to your platform since I think you're still allowing advertisers to target using that data?

Ned Segal: So, I'll tell you just when we think about the broader market. We feel like there is so much that's in our control, right now. The return to growth that we've seen over the last year has really been driven by our hard work and execution and having much clearer focus around what Twitter's for and why people should kind of platform. A much clearer focus on how we talk to advertisers and what we talk to them about along with improvements on the product on both the Twitter that we all use and the improvements on the ad product. So it's hard to say when we see benefit on the platform whether that's because of something that happened somewhere else or something that happened on platform and a big part of that because we feel like the hard work that we're doing has done a lot to drive advertisers to Twitter as opposed to things that are happening somewhere else.

Mark May: Maybe we have time for one more? Maybe a question on expenses. Expenses declined last year and despite the revenue decline, last year margins still expanded. Some or possibly all of that expense reduction though was due to existing a few businesses and some reduction in force. We've seen expenses start growing again in the first two quarters of this year, and you guided for EBITDA margins to decline in Q3 after several quarters of expansion. Question is, can you talk some of the drivers of that change in trajectory and where you're -- I think, we touched on this a little bit earlier but --

Ned Segal: I think we did. So --

Mark May: Is it mostly on the hiring side that we talked about?

Ned Segal: Headcount has a pretty significant impact on the margin profile of the business in the near-term. We've talked about, and there's no change in our thinking that overtime, Twitter can be a 40% to 45% adjusted EBITDA margin business. And we demonstrated the ability to do that in the fourth quarter of last year when we have 42% margins. We just have to carefully weigh the opportunity to show margin improvement or our target margins even with the growth opportunities that we see around the business. And we made clear back in February that this is going to be a year where we're going to invest to drive growth and we tried to consistently do that and talk about it on the calls that we've had and so that margin improvement that we saw in the first half of the year that can drive overall margin improvement on an annual basis. But the accumulation of headcount over the course of the year can cause the margin improvement to diminish over the course of the year.

But you're right, when we think about health, audience and revenue products and sales people, and continue to invest in the platform that delivers Twitter those things will cause us to accumulate headcount. And they can -- unless offset by revenue, they have the impact on margins that you described.

Mark May: Well, congrats on the success this year. And thanks again for coming to the conference.

Ned Segal: Thank you, Mark. Thanks for having us. I'm going to take a nap in this chair.